

ISAC Meeting - Bus Talk

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### **Polyphagous Shot Hole Borer**

The Polyphagous Shot Hole Borer (PSHB) is a new pest in Southern California. This boring beetle, from the group of beetles known as ambrosia beetles, drills into trees and brings with it a fungus (*Fusarium* sp.). The PSHB attacks many species of trees, but many species are resistant to the fungus it carries. The beetle is dark brown to black and tiny, with females between 0.07 and 0.1 inches long, and males even smaller, usually about 0.05 inches long. Pregnant females bore through the tree's bark, creating galleries under the bark. They plant the fungus in these galleries, where it grows and spreads throughout a susceptible tree. The female then lays her eggs in these galleries and when the eggs hatch, the larvae eat the fungus. The larvae develop into adults in about a month. Many more of the larvae develop into females than males, and the females mate with the males (their brothers) while still in the gallery. The pregnant females then pick up some of the fungus in their mouths, and leave through the entry holes created by their mothers to start the process again. (from the 'University of California Pest and Diseases of Southern California Oaks – Polyphagous Shot Hole Borer' fact sheet)

- The Beetle and the Fungus  
Review of the UC Riverside Fact Sheet
- Review of Hosts:  
'Polyphagous Shot Hole Borer + *Fusarium* Dieback  
Decision Making for Reproductive Hosts' (Handout from UC Riverside)
- Distribution Map (Eskalen lab, UC Riverside)
- Current available responses: Survey, Treatment(?), Removals